

Technical Report No. 2

Health Sector Reform in Cambodia

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Partnerships
for Health
Reform

Mission

The Partnerships for Health Reform (PHR) Project seeks to improve people's health in low- and middle-income countries by supporting health sector reforms that ensure equitable access to efficient, sustainable, quality health care services. In partnership with local stakeholders, PHR promotes an integrated approach to health reform and builds capacity in the following key areas:

- ▲ *policy formulation and implementation*
- ▲ *health economics and financing*
- ▲ *organization and management of health systems*

PHR advances knowledge and methodologies to develop, implement, and monitor health reforms and their impact, and informs and guides the exchange of knowledge on critical health reform issues.

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Abstract

The poor health status of Cambodia's population is due in part to low levels of income and education and in part to the condition of its public health system, particularly in rural areas. The current state of the public health system reflects the severe shortages of resources available in recent years and the effects of extreme decentralization. The Khmer Rouge eliminated much of the country's skilled medical manpower personnel and, until recently, the Ministry of Health played a relatively minor role in directing the provincial health system. Current efforts in health reform are focused on generating additional resources through user fees to supplement the low salaries of government health workers and introducing management reforms used in the private sector into the government health system. The National Conference on Financing of Health Services was convened to develop guidelines for implementing a series of pilot tests in government health facilities that include user fees and innovative management approaches. This document presents a review of this conference and experiences of the United States Agency for International Development's grantees with cost recovery and financial sustainability. It recommends that more assistance be provided to for-profit health providers and suggests several approaches designed to encourage these providers to offer more preventive health services and improve the quality of their curative care. It also encourages grantees to become more cost conscious and to experiment with measures designed to reduce their unit costs.

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Acronyms

ARC	American Refugee Committee
ADB	Asian Development Bank
AIDS	Acquired Immune Deficiency Syndrome
CBD	Community Based Distribution
CDD/ARI	Control of Diarrheal Disease/Acute Respiratory Infection
DPT	Diphtheria
EPI	Expanded Program on Immunization
FPIA	Family Planning International Assistance
HIV	Human Immunodeficiency Virus
HPN	Health, Population and Nutrition
IUD	Intra-Uterine Device
KAP	Knowledge, Attitudes, Practice
MOH	Ministry of Health
MSF	Médecins San Frontieres
NGO	Non-governmental Organization
ODA	Overseas Development Agency
ORS	Oral Rehydration Salts
PACT/JSI	Private Agencies Collaborating Together/John Snow International
PSI	Population Services International
SESC	Socio-Economic Survey of Cambodia
STD	Sexually Transmitted Disease
TB	Tuberculosis
USAID	United States Agency for International Development
WHO	World Health Organization

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Executive Summary

The Cambodian Ministry of Health is currently trying to recover from the aftermath of several decades of war and devastation. The health status of the population is very low compared with other countries in the region, and the quality and accessibility of health services in rural areas is very poor. The government's health sector has functioned until recently without central coordination. Current efforts in health reform are focused on generating additional resources through user fees to supplement the extremely low salaries of government health workers and introducing management reforms into the system to help it function more like the private sector. The National Conference on Financing of Health Services was convened to develop guidelines for implementing a series of pilot tests of user fees in government health facilities and innovative approaches to management.

Due to the poor condition of the public health system, most government health workers have developed private practices on the side, even in rural areas. These private practices have permitted them to supplement their meager incomes by providing curative health care and other services valued by the rural population. A thriving for-profit sector, based largely on dispensing pharmaceuticals, is found in urban areas. In addition, Cambodians frequently go directly to pharmacists and drug vendors to treat minor illnesses. Much of United States Agency for International Development (USAID) and other donors' health sector assistance has, until recently, been directed to non-governmental organizations and the government. USAID's very successful Condom Social Marketing Program is an exception. This report recommends that more assistance be provided to for-profit health providers and suggests several approaches designed to encourage them to offer more preventive health services and improve the quality of their curative care.

Most USAID grantees and the facilities they assist are currently charging user fees for both curative and preventive health services. Levels of cost recovery vary, but they are generally in the 5 to 15 percent range. This report recommends that the grantees try to recover a higher percentage of costs of providing private curative services, but that they not raise fees on preventive services until they confirm that the fees charged do not limit access to services for the poor. Most grantees do not currently know how much their services cost. USAID is also encouraging grantees to become more cost conscious and experiment with measures designed to reduce unit costs.

1. Introduction

The Partnerships for Health Reform (PHR) Project is a global five-year United States Agency for International Development (USAID)-funded effort that began in October 1995. The purpose of the project is to support health-sector reform and advance knowledge about health sector issues in Africa, Asia, Latin America and the Caribbean, the Middle East, and Eastern Europe. PHR concentrates on supporting reform initiatives that make the health sector more effective in improving populations' health status. It emphasizes the priorities of child health, maternal health, family planning, and HIV/AIDS services that USAID's Population, Health and Nutrition (PHN) Center has identified in its strategic objectives. The project offers long- and short-term technical assistance, training, research, and information services in three core areas. The core areas are as follows:

Health Policy and Management

- ▲ formulation, regulation, implementation, and monitoring of health policies
- ▲ institutional reform, decentralization, and results-oriented planning and management
- ▲ human resource and infrastructure capacity building for policy and management processes

Health Care Financing

- ▲ design, implementation, and evaluation of cost-recovery, insurance, managed care, the Ministry of Health (MOH) budgeting, and other innovative means to generate resources
- ▲ improved methods to allocate, manage, and monitor use of health resources in the public and private sectors and by households
- ▲ enhancement of the cost-effectiveness of health and nutrition interventions; cost-estimating and expenditure tracking

Health Service Improvement

- ▲ organization, supervision, and quality assurance of health and nutrition services
- ▲ pharmaceutical policy and management, prescription practices, and drug logistics
- ▲ private-sector development, public-private linkages, and strengthening non-governmental organization (NGO) management

Abt Associates Inc., in collaboration with University Research Corporation, Harvard School of Public Health, Development Associates, Inc., and the International Affairs Center of Howard

University, implements PHR. This collaborative approach provides a cross-section of disciplines and extensive health-sector policy and reform experience throughout the world. Under the project, Dr. Jim Knowles, senior economist at Abt Associates Inc., visited Cambodia for two weeks to participate in the National Conference on Financing Health Services and review the experiences of USAID grantees in the areas of cost recovery and financial sustainability. This report is a summary of his findings, observations, and recommendations for future programming.

2. Activities and Findings

2.1 Cambodia's Health System

Cambodia has some of the poorest health outcomes of any country in Southeast Asia. Although based on limited data, the infant mortality rate is currently estimated to be 115 per 1,000 births, compared with an average of 42 in the region. Mortality for children under 5 years old is estimated to be 181 per 1,000 live births. At 45, the crude birth rate is probably the highest in Asia. The modern method contraceptive prevalence rate is currently about 7 percent. The maternal mortality ratio is estimated to be 500 per 100,000 births. Infectious diseases, notably malaria, tuberculosis, acute respiratory diseases, and diarrhea—as well as rapidly growing rates of HIV infection—are the main causes of death. Part of the reason for the poor health status of the population is undoubtedly low levels of income and education. Cambodia's 1994 GDP per capita was estimated to be only \$170, one of the lowest levels in the world. Education levels are generally low, particularly among women. Female adult literacy was estimated to be only 22 percent in 1992.

The woeful condition of the public health system, particularly in rural areas, is an important determinant of the poor health status of the population. The Khmer Rouge eliminated much of the country's skilled medical personnel. Of the relative few trained health workers available, only 14 percent are deployed at the commune level where 80 percent of the population lives. Only 4 percent of doctors work in district hospitals that serve rural areas. Due to lack of training and limited equipment, most district hospitals (with an average of about 24 staff and 35 beds) are utilized only for outpatient services and the care of tuberculosis (TB) patients. Of 19 hospitals surveyed in 5 provinces, for example, none was equipped to do Caesarean sections, and none provided radiology services. Of 100 communes surveyed, only 55 percent had a clinic building, of which only 60 percent were officially used to provide health services. With an average of 2.8 staff, public health services at the commune level are limited in most cases to dispensing the contents of periodically distributed basic drug kits and assembling children for immunization visits.

The current poor state of the country's public health system is not a reflection on the MOH. Instead it reflects the severe shortages of resources available to the health system in recent years and the effects of extreme decentralization. Until recently, the MOH played a relatively minor role in directing the provincial health system. A large number of NGOs have been working in the health system in recent years, but they have been active only in certain areas without much central coordination or direction. The MOH budget has increased significantly in the past couple of years, a trend that is expected to continue. A series of administrative reforms has also given the MOH the means to reassert control over the country's health system. Major projects being funded by multilateral and bilateral donors (including the World Health Organization, World Bank, Asian Development Bank, British Overseas Development Agency, German Credit Agency for Reconstruction, and USAID) will further strengthen the MOH in its attempt to reorient the country's health system toward getting better health value for its money.

2.2 Health Finance

Cambodia's health system is currently financed by the government (about \$2.70 per capita, up from \$2 per capita in 1995), international donors and NGOs (about \$2 per capita), and private household expenditures (estimates range from \$12 to \$18 per capita). The government's contribution is one of the lowest in the region—only Vietnam's has been lower in recent years¹—and only about 15 percent of government health expenditures are spent on community-level services for the rural population. In the 1996 budget, salaries are expected to absorb 23 percent of recurrent expenditures, with pharmaceuticals taking 29 percent and other expenditures 48 percent. The salary share of the MOH budget is much lower than that of most other low-income countries, whereas the share of pharmaceuticals in MOH budgets are relatively high. The 1996 budget is divided almost equally between capital and recurrent expenditures. All external funding is channeled through the capital budget, accounting for 80 percent of the total capital budget or 40 percent of total government health spending. According to a recent household income and expenditure study, Socio-Economic Survey of Cambodia (SESC) 1993/1994, most private expenditures are used to purchase pharmaceuticals (about 80 percent nationally, but 70 percent in Phnom Penh).

There is currently no formal system of charging fees in government health facilities, but informal fees are widely charged. The cost of a serious illness necessitating hospitalization, usually in a provincial hospital, can be several hundred dollars. This typically amounts to a financial catastrophe for rural households. There is presently no health insurance.

Salaries of about \$12 per month are paid to government health workers in the rural areas. As a consequence, most workers have set up private practices on the side, and many operate small private pharmacies as part of their practices. They are typically able to earn somewhat more from these private practices than from their public salaries, and the services are generally well received by the population. As part of a recent background study for an Asian Development Bank (ADB) health sector loan, 33 government health workers from 21 communes in four provinces were interviewed. They reported average monthly salaries of \$10 from their government jobs and \$14 per month in income from their private practices. The latter consumed an average of 10 of 37 hours worked per week.

2.3 Health Sector Reform

Health sector reform currently centers on efforts to strengthen the MOH by providing support for a basic package of cost-effective health interventions. Proposed reform includes the following elements:

- ▲ Increasing the resources available to the MOH by increasing its budget over time. Recent budget increases reflect this effort.

¹However, despite a low level of funding to its health system, Vietnam presents some of the best health outcomes in the region, with infant and under 5 mortality rates of 37 and 49. Part of this superior performance is due to higher investments in the past as well as to the almost universal adult female literacy which now exists in the country.

- ▲ Restructuring and rationalizing the government health system so that the distribution of facilities corresponds to population-based needs rather than to administrative boundaries. A World Health Organization/Overseas Development Agency (WHO/OVA) project based in the MOH has assisted in the development of a new system that will be based on district-level referral hospitals (serving 100 to 200,000 persons) and commune-level health centers (serving 10 to 15,000 persons) providing primary and preventive care.
- ▲ Improving the quality of services. Steps include providing additional training to health workers, refurbishing health facilities, and assuring an adequate supply of basic drugs.
- ▲ Introducing a formal system of user fees into public health facilities at the district and commune levels. Initially this would be done on a pilot basis. (See discussion of the National Conference on Financing Health Services below.) In addition to providing more resources at the community level, it is hoped that the introduction of formal fees would eliminate the use of informal fees and curb the private practices of public health workers. The poor would be exempted from paying fees through the use of systems yet to be developed and tested.
- ▲ Improving the management of health facilities at the district and commune levels. This would be done on a pilot basis by contracting management services from NGOs and other private-sector sources to operate government health facilities or by contracting out the operation of an entire district's health facilities to a private group. Another measure designed to improve the management of public health facilities involves setting up community health committees in connection with the introduction of user fees.
- ▲ Later this year, the government is expected to sign a \$25 million project with the ADB. Twenty million dollars of the project would be financed by a loan and the rest financed by the government to pilot test most of the above cited elements of health reform in five provinces during the next five years.

Although some variation is anticipated in the financing approaches tested by the different pilots, they are expected to have the following features in common:

- ▲ Public health service delivery units would be permitted to charge user fees and retain the revenue for their own use. It is expected that much of the revenue would be used to pay higher salaries to personnel in return for their agreement not to engage in private practice or to charge fees informally.
- ▲ The financing reforms would be linked to a set of management reforms. In particular, the use of contracts between various levels of the public health system would provide a given level of services of a given quality in return for a budget and the use of contracted in management from NGOs. The project also provides for contracting out of public health services in a given district to private organizations on the basis of competitive bidding.

The health financing reforms would be implemented in selected hospitals and primary care units. In addition to the public-sector pilots, one or more private-sector pilots are envisaged to test the use of social marketing techniques to encourage the delivery of a set of medically appropriate and cost-effective interventions for selected health conditions (e.g., malaria, tuberculosis, and diarrhea).

Emphasis would be placed on the evaluation of these pilot tests. On the basis of the evaluations, it is expected that the National Charter would be revised and more pilots implemented before a national health financing policy was adopted. The pilots will be evaluated, particularly with respect to their effects on:

- ▲ *Equity.* Do the new financing systems limit access on the part of the poor? Are people with the same health needs able to obtain the same access to services?
- ▲ *Efficiency.* Do the new financing systems obtain maximum health outcomes per dollars spent?
- ▲ *Sustainability.* Are the new financing systems able to function on their own, or do they continue to depend on external financing?
- ▲ *Acceptability.* Does the financing system respond to consumer and provider preferences?

Other donors are expected to fund additional pilot projects during this period. The National Conference on Financing Health Services, discussed below, was convened to provide a policy and implementation framework for these pilot efforts in health reform.

2.4 General Observations on the Current Directions of Health Reform

The current prescription for health reform in Cambodia has many attractive features and is consistent with similar efforts in a number of other developing countries. The spontaneous growth, however, of the private health system in rural areas—undoubtedly as a response to the woeful condition of the public health system—presents both a challenge and an opportunity. It is a challenge because once clients and providers have experienced a private system, it will be difficult for them to participate enthusiastically in a reconstituted version of the public system. As the background study for the ADB loan states:

- ▲ Attitudes of medical staff in public health centers were often noted as negative and condescending, which antagonized people who then turned to polite practitioners.... In one case the researchers observed a patient who was sent away and told to return the following morning. The next morning the same patient was refused treatment because the staff had their monthly meeting. This practice of regarding patients as unimportant contributed much to the general feeling that private practitioners provide better treatment (Rieng, Cham and Chang, 1995, page 8).
- ▲ Villagers prefer the services of private practitioners, reasoning simply that public health workers are not providing the services or drugs they require—no clinic building, no equipment, no drugs, and often no care. People said that payment for the services ensured the treatment, provision of drugs, and care (Rieng, Cham and Chang, 1995, page 10).
- ▲ The main conclusion is that basic public health care depends on the private sector. All public health workers earn income from this sector, hence it would be very difficult to persuade them to change their behavior. Their preference is for skills training and better equipment and clinic buildings. Whether or not this would improve public services

remains a question. It may be that these improved skills and better materials would be used to improve health workers' private practices (Rieng, Cham and Chang, 1995, page 17).

If the conclusions in this report are correct and applicable beyond the four villages studied, the current direction of health reform may not be responsive to consumer and provider preferences. What appears to be called for, at a minimum, is some pilot testing of an alternative approach to health reform that would try to strengthen the spontaneously generated private health system. Although it is beyond the scope of this report to provide specifics, the broad features of such a reform might include the following:

- ▲ Private providers continue to receive subsidies from the public health system (e.g., free drugs, salary payments, use of government facilities) in return for their agreement to provide certain preventive health services (e.g., immunizations, birth spacing, vitamin A supplements, prenatal care) and services to the poor at reduced fees. This would basically extend arrangements currently in practice.
- ▲ The continuation of subsidies to private providers would depend on their success in achieving selected coverage targets for key services (e.g., rates of immunization, prenatal care, and contraceptive prevalence) and maintaining access to services for the poor.
- ▲ Training would be provided to private practitioners with varying levels of subsidies. Training related to public health services would be more heavily subsidized than training related to the provision of private curative services. With their continued access to subsidies being effectively linked to performance indicators, however, providers should be keenly motivated to receive even preventive care-related training.
- ▲ Province-level staff would monitor the performance of private providers in each district. They might be assisted in this effort by community health committees that would collect coverage and quality of care data periodically at the household level.
- ▲ Province-level staff would prepare and disseminate health information to consumers in each commune that would help them become better consumers of health services. This information would focus on the value of preventive care, correct use of new technologies (e.g., contraceptives, oral rehydration salts (ORS), and how to become more efficient consumers of pharmaceuticals.

The point is that the spontaneous development of the private health sector in rural areas is a phenomenon that has occurred in few other developing countries. It is now too narrowly focused on curative care and may not be providing this efficiently or with acceptable standards of quality. It may also limit access on the part of the poor. However, it is inherently sustainable, appears to be accepted by broad segments of the rural population, and has the potential to become quite efficient. Some thought should at least be given to sponsoring one or two pilot tests along the lines suggested above.

In addition to a lack of interest in the nascent private system, current health reform neglects an important and growing need for social financing of the costs of catastrophic illness. In the absence of free hospitalization, which presents its own problems, some way must be found to spread the costs of serious illness among a wider population. The new ADB project will provide limited assistance to

set up pilot community-based loan schemes to finance such costs. Although this approach, if successful, may avoid the worst consequences of families suffering catastrophic illness (e.g., loss of homes and land, which is apparently a fairly common occurrence with such illnesses), it falls short of true social financing in which the healthy share the costs of providing care to the sick. It would be preferable to set up a government-backed, but possibly a private², rural health insurance scheme to cover catastrophic illness. The main features of such a scheme might include the following:

- ▲ It would be limited to catastrophic illnesses, with the benefit package clearly specified. Covering other conditions would unnecessarily drive up administrative costs and exacerbate other negative outcomes of insurance (e.g., the moral hazards of over-consuming health care or of failing to take steps to prevent illness).
- ▲ To avoid problems of selectivity—a preponderance of enrollees with greater risk of illness—enrollment should be limited to entire villages or communes, and an appropriate discount should be provided for larger risk pools. No individual enrollment should be permitted.
- ▲ The payment of premiums should be timed to coincide with the harvesting of crops in each area. Each village or commune would be responsible for the payment of the premium for all of its inhabitants. In practice, this would mean that the relatively wealthy individuals in the village would have to pay more to compensate for those who were too poor to pay the full premium. However, it should be left to each village or commune to work out the financing of its premiums.
- ▲ Some aspects of managed care should be introduced into the insurance scheme immediately. Such measures would be designed to reinforce other aspects of health reform and might include, for example, waiving copayments (i.e., the out-of-pocket costs paid by the consumer) if treatment is received at lower-cost district hospitals or if patients are referred to provincial hospitals by district hospitals.

2.5 Conference on Financing Health Services

The Conference on Financing Health Services (Feb. 5-9, 1996) was organized by the MOH to develop a National Charter under which it could test various approaches to health sector financing reform. WHO assisted with the conference and provided the services of several staff from its Geneva headquarters as well as those of several experts working in a large WHO/ODA project based in the MOH. Conference attendees included MOH staff from both central and provincial offices, representatives of NGOs and donors, and the ministers of health and economy and finance.

The conference focused on developing the National Charter as a necessary step before initiating a series of pilot tests. Conference participants also recommended that the pilots be evaluated with respect to the quality of services.

²One of CARE's grantees (SEILA), an expanding and well regarded credit scheme, is reportedly interested in getting into health insurance.

The first two days of the conference were devoted to a series of presentations that provided background information on the health sector (e.g., projections of health budgets, results of a survey of NGOs' experiences with user fees) and reviewed recent international experiences with user fees and other aspects of health finance reform. The latter presentations were made by several international experts: Jean Perrot and Joseph Kutzin of WHO; Roger England of the Institute for Health Sector Development, UK; and A. Paganini of UNICEF.

The next two days were devoted to a review of the draft "National Charter on Health Financing in the Kingdom of Cambodia" by a series of eight working groups. The last day of the conference focused on a final review of the revised draft National Charter by participants (morning) and its presentation to donor and NGO representatives (afternoon).

The conference was well organized and the quality of the participation very high. Because it focused on the task of reviewing and revising the draft National Charter, however, the conference presented very little information on Cambodia's health system. Presumably a thorough review of the available information on health sector financing was done at an earlier stage.

The conference did not consider a wide range of policy options for health sector reform. The accepted model was one of fairly strong central control, down to the level of commune services. Flexibility was encouraged with respect to financing and management. Exactly how an appropriate balance between the desire to maintain some central control and the need to provide managerial autonomy to facilities would be achieved remained unanswered. Cambodia's public health system has been extremely decentralized until recently, so the alternative of transferring financing and operational responsibility for the primary health system to communes, as has been done in neighboring Vietnam, is not under active consideration.³ Nor, as discussed above, was the option of testing an improved version of a purely private-sector model considered, despite the fact that this is the dominant mode of health service delivery currently found at the commune level.

It is clear from mortality statistics, data on HIV prevalence, and the findings of a recent contraceptive knowledge-attitudes-practice (KAP) survey that Cambodia's highest health sector priorities should be in preventive health, child survival, and reproductive health services. Although the proposed health sector reforms are most directly concerned with financing of private curative health services, any strengthening of the currently underutilized and widely disparaged public health system should improve its capacity to deliver public health services. There is even some evidence from health reform in other countries (some of which was presented at the conference) that financing quality improvements through user fees is associated with higher rates of immunization and more extensive use of such services as prenatal care.

A few additional concerns surfaced during the conference:

- ▲ It was not clear that all of the Cambodian principals fully grasp some of the innovative management concepts being proposed, such as management by contract, or that some of the international experts advocating these reforms fully understand the current

³Under such an arrangement, the MOH could continue to subsidize various public health services, such as immunizations and TB treatment, but it would not provide curative care at the primary level.

administrative and budgeting procedures that may be obstacles to their use. For example, in one working group, a key international expert who made reference to the distribution of funds by the MOH to the provinces, was informed by the Cambodians that the provinces do not get their funding from the MOH. Instead they are funded on the basis of budgets they prepare and submit to the Ministry of Economy and Finance.

- ▲ Although much can be said for the use of a results-oriented management by a contract approach in the public health system, one unanticipated effect may be to narrow its focus on a few program outputs to the detriment of broader health goals. For example, the previous experience in India and elsewhere with family-planning targets suggests that focusing health providers on the attainment of a limited number of targets risks distorting the system's performance toward the attainment of those targets and little else.
- ▲ The conference may have unnecessarily raised expectations about what can be learned from a limited number of pilot tests. Making sound inferences about the effects of the pilots on outcomes such as equity, efficiency, and sustainability will require a careful experimental design with multiple test sites, either randomly selected or with due consideration given to problems of selectivity bias. Accordingly, the pilots should be presented more realistically as demonstrations to show that financing reforms are both feasible and acceptable to the major stakeholders. A more systematic evaluation could, and ought, to be built into a phase-in of whatever national strategy is adopted.

2.6 USAID's Population, Health, and Nutrition Sector Setting

USAID is in the process of developing a multiyear strategy for assistance in the areas of health, population, and nutrition. According to USAID, this strategy should:

- ▲ be consistent with Agency policy/guidelines and with USAID/Cambodia's strategic approach;
- ▲ have the potential for *measurable impact*;
- ▲ reinforce and complement existing national plans for health sector development;
- ▲ fill an important need and respond to significant demand in the health sector in Cambodia;
- ▲ expand and replicate successful Cambodian models;
- ▲ have the potential for policy change or reform;
- ▲ be a program area where USAID has a comparative advantage and that builds on 20 years of USAID technical knowledge and program experience in maternal and child health;
- ▲ be realistic and feasible given funding and management constraints; and
- ▲ complement and enhance other donor maternal and child health programs and have the potential to leverage other donor resources.

USAID plans to strengthen the capacity and sustainability of the public and private sectors to deliver the following reproductive health services:

- ▲ birth spacing;
- ▲ sexually transmitted disease (STD) diagnosis and management;
- ▲ safe motherhood;
- ▲ control of diarrheal disease/acute respiratory diseases (CDD/ARI); and
- ▲ micronutrients (vitamin A, iodine).

It is evident from the health statistics presented above that progress in all of these areas should receive high priority in any health sector assistance program in Cambodia. In moving ahead with its activities, however, USAID should include the for-profit private sector to the extent possible in all programming elements. It is rarely the case that private-sector interventions offer the opportunity for both impact and sustainability. More typically, donors find that they are trading off impact for sustainability, particularly in working with the commercial sector. In Cambodia, however, private-sector initiatives can have significant impact. One reason for this potential, as noted above, is the fact that almost all government health workers in rural areas operate private practices on the side. The impact of initiatives in the private sector may also be *relatively* higher than that of similar initiatives in the public sector because the latter are not yet fully operational. At some point, a public-sector infrastructure may offer opportunities for greater impact, but this is not the case now.

The main objection to working with the for-profit private sector is that the poor may not have access to these services, due to the high prices charged. This is a valid concern. If the public sector is willing to subsidize private providers, however, basic health services for the poor may be provided, either in return for continuing access to subsidies or through a voucher system. For example, to continue to receive subsidies in the form of partial salary, training, commodities, or other benefits, private providers might be required to submit records to the public sector on certain types of services provided (e.g., birth spacing, immunizations, prenatal care, STD diagnosis), together with an indication of whether the person was charged. Services provided to the poor by private clinics in large towns could be financed by vouchers redeemed by a sponsoring USAID project. The vouchers would be furnished to clients by commune-level providers as part of the referral process.⁴

The opportunities for private-sector initiatives in connection with each of the proposed USAID interventions in birth spacing, STD diagnosis and management, safe motherhood, CDD/ARI, and micronutrients are briefly discussed below.

Birth Spacing. Birth spacing is the term used in Cambodia for family planning. The country's first national KAP survey was conducted in 1994/95 and used a modified Demographic and Health Survey Model B questionnaire. Although the survey indicates that there is high interest on the part of many women to limit as well as space births (unmet need overall is quite high), the government

⁴The key requirement is that reimbursement to private providers be linked to services provided or to outcomes achieved (i.e., results). Under the current public system, subsidies are received without regard to performance.

has felt uncomfortable about a program with limiting births as an objective given the country's recent history of war and devastation. As indicated above, fertility is now very high and contraceptive use very low by regional standards.

The recent KAP survey reveals that most women know very little about contraceptives or where to obtain them. Only 36 percent of respondents knew any modern contraceptive method without prompting. Although almost two-thirds of the respondents had heard of the IUD and injections as methods with prompting, only 7 percent spontaneously mentioned condoms, and only 36 percent knew about condoms after they were described to them. However, the survey was done before the start-up of the successful USAID-funded condom social marketing project discussed below. Among women who knew of at least one source of contraception, almost two-thirds did not know where to obtain the method. Knowledge of contraceptives was not much higher among educated respondents, although educated women who knew of contraceptives were somewhat better informed about where to get them. For example, 47 percent of women who completed secondary or higher schooling knew where to obtain contraceptives, compared with only 31 percent of women without any schooling.

It is clear from these data that the private market for information has not worked well in disseminating birth spacing technologies. A family planning program would be very helpful in making this important technology known and available to couples. Although there is at present no strong evidence to suggest that increased birth spacing or even a reduction in fertility would provide significant economic benefits at a national level, the potential benefits for families could be substantial. Knowledge of and access to family planning services should particularly benefit women, whose current status is very low. Helping to disseminate the modern birth control technology to Cambodians should be a very high priority of USAID's health, population and nutrition program.

There is a question about how to best accomplish this. USAID is currently providing support to several NGOs (Family Planning International Assistance [FPIA], CARE, Médecins Sans Frontières [MSF]) to provide birth spacing and reproductive health services (prenatal care, STD diagnosis and treatment). Some NGOs (FPIA, CARE, American Refugee Committee [ARC] and MSF) have also tried to provide similar services within government health facilities. Several evaluations are currently under way to determine the degree of success they have experienced. There have been no attempts yet to offer NGO assistance to private for-profit service providers to enable them to provide birth spacing and reproductive health services. This should be done in the future. USAID assistance might provide training, equipment, and subsidized commodities to private practitioners, particularly to commune-level private providers in rural areas (i.e., private midwives and government health workers with private practices on the side). Private clinics and selected private practitioners in large towns should be assisted to provide STD diagnosis and treatment and clinical methods of birth spacing (IUDs initially and eventually sterilization) with the objective of certifying them as high-quality providers of these services. Services could be provided to clients referred by commune-level private providers in return for a voucher that would be reimbursed through a USAID project. In this way, poor rural women wishing to use the IUD would have access to high quality services in much the same way as their middle-income urban counterparts do.

The Population Services International's (PSI) Condom Social Marketing Project is managing what appears to be a very successful program in Cambodia. It is targeted to HIV/AIDS prevention, mostly encouraging condom use by men when visiting prostitutes, but it has recently begun to promote the use of condoms within the family for birth spacing purposes. Condoms are currently stigmatized in Cambodia, in much the same way as they are in many African countries, due to their

association with prostitutes. PSI faces an uphill struggle in trying to turn around their image of condoms, but it is a worthwhile effort. It was suggested that PSI consider holding up Japan as an example of a country that uses condoms extensively for birth spacing. PSI is planning to promote the improved status of women within the family as a theme linked to increased condom use for birth spacing.

STD Diagnosis and Treatment. Probably no health problem in Cambodia requires more urgent intervention than does the rampant HIV/AIDS epidemic. USAID is making a major contribution to the battle against AIDS by supporting the bulk of the costs of the successful condom social marketing program. Although in existence for only a little more than a year, the program has sold more than 6 million condoms and is currently selling about 1 million condoms per month.⁵ Now USAID is interested in supporting public-sector STD diagnosis and treatment. There is recent evidence that STD infection predisposes people to HIV infection and that even modest STD treatment programs can achieve reductions of about 40 percent in the incidence of HIV infection (Grosskurth et al, 1995). USAID should also include private for-profit providers in this effort, both at the commune level (i.e., private midwives and government health workers with private practices on the side) and in large towns (private obstetric/gynecological practitioners and clinics). Training of private pharmacists and drug vendors is also critical because they are the providers of choice for men with STDs.

Safe Motherhood. By supporting birth spacing, assuming that it reduces overall levels of fertility, USAID is promoting one of the most powerful interventions available to reduce maternal mortality and morbidity. A mother's risk of childbirth-related mortality and morbidity is more than proportional to the number of births she has. USAID is already supporting NGOs that provide high-quality prenatal care (FPIA). It now proposes to assist in the development of similar services within the public sector. The for-profit private sector should also be included in this effort, particularly at the commune level, by offering training and other support to commune-level private providers who agree to provide these services. Some consideration should also be given to sponsoring the social marketing of birth kits targeted to private midwives.

Substantially reducing the level of maternal mortality and morbidity per birth (as reflected in the maternal mortality ratio) requires access to hospitals equipped to handle acute childbirth-related problems. Many provincial-level hospitals have this capability, but few district-level hospitals do. Nor are ambulance units widely available in rural areas. The ADB study referred to above found ambulances in only two of 19 surveyed district hospitals. As the hospital system is gradually strengthened, however, the positive effect of prenatal care on the maternal mortality ratio should be progressively greater.

CDD/ARI. Child deaths from diarrhea and acute respiratory disease are very high. USAID plans to strengthen government health services to address these problems. The for-profit private sector should be included in this initiative as well. An ORS social marketing effort could address the problem of no commercial outlets for ORS. NGOs and private practitioners at the commune level could readily market an ORS product. Including commune-level private practitioners in the ARI

⁵There is disturbing information that the project is running out of condoms, which are currently being supplied by ODA. If true, this would be extremely regrettable. The program's accomplishments and future needs are currently the subject of a PSI-administered midterm evaluation.

program should contribute to making the program more effective in managing an important category of illness.

Micronutrients. Iodine and vitamin-A deficiency are two serious health problems and can be addressed through the government health system. They can, however, also be addressed—perhaps more effectively in the Cambodian context—through social marketing. NGOs and commune-level private providers could serve as the key rural distribution points for the program.⁶

2.7 Review of Cost Recovery and Financial Sustainability

The author met with representatives of each USAID/HPN grantee during the second week of his stay in Cambodia (February 1996) and reviewed their experiences with cost recovery and financial sustainability. The purpose of the visits was to suggest ways they might improve this aspect of their work and recommend future activities that might be incorporated into USAID's new strategy. Meetings were held with representatives of ARC, CARE, FPIA, MSF/USA, PSI, and PACT/JSI. It was learned that all of the grantees, even those working in the public sector, are practicing cost recovery. However, the revenues collected amount to only about 5 to 15 percent of recurrent costs (excluding expatriate labor).

The cost-recovery experience of the ARC's project assisting district health facilities in Kon Dieng district of Pursat province is fairly typical of efforts to work with the public sector. This project has provided assistance to both the district hospital and commune health clinics during the past four years. Levels of utilization were extremely low at both the district and commune levels when the project began, but rates have increased steadily with improvements in the breadth and quality of services provided. As is typically the case throughout the public health system, fees were charged informally for a variety of services. However, beginning in January 1994, a set of formal fees and procedures for collecting and managing the revenues were introduced at both the district and commune levels in Kon Dieng district. Fees are charged for both preventive and curative services, although fees for some preventive services are waived at the commune level or if obtained from a mobile clinic. The fee schedule, which is similar to fees charged formally at most government facilities, is provided in Table 1.

At the district level, fees are collected by the health worker providing the service. The revenue is put into a common fund for use in purchasing supplies not furnished by the MOH. The funds are managed by an accountant under the supervision of the district health director. During the three-month period October-December 1995, revenue from fees averaged only about \$6 per month, about 80 percent of which was generated by birth spacing. At the commune level, the funds are again collected and managed by the health workers. Half of the revenue is used to purchase needed supplies and the other half for staff incentives. The fees charged are only a fraction of what is charged privately for comparable services, and the revenue recovered amounts of only a few percent

⁶The social marketing program already makes extensive use of NGOs as distribution channels. There is no wholesale drug distribution system currently operating in Cambodia. There is a need to extend the distribution network to the commune level in rural areas by enlisting the active participation of commune-level private providers.

of costs. There has been no attempt to estimate costs, so it is unknown to what extent the fee structure reflects the underlying costs of the individual services.

Table 1 Fees Charged in Government Health Facilities in Kon Dieng District, Pursat Province (US\$1 = 2550 Riel)			
Service	District Hospital	Commune Clinic	Mobile Clinic
Well-baby care (Yellow Card), entitling child to EPI coverage, vitamin A, and (in most cases) growth monitoring	200	Free	Free
Antenatal care (White Card), entitling pregnant woman to antenatal care visits	200	Free	Free
Birthing spacing card, entitling woman to purchase contraceptives through the government health system numerous times	500	500	500
Contraceptives, per dose (i.e., one depoprovera injection, three packs of pills, or 30 condoms)	1000	1000	1000
Outpatient department care, per episode (usually 1-2 visits)	300	NA	NA
Laboratory services, per episode (usually 1-2 tests)	300	NA	NA
Inpatient care	Free	NA	NA
Pharmaceuticals	Free	Free	Free
Inpatient Care	Free	NA	NA
Pharmaceuticals	Free	Free	Free
Follow up periodically and meet with officials at higher levels to maintain and build support for the pilot project in its integrated form	2 months	MSPyBS; Special Team of the Strategic Planning Seminar	Yes

The poor are exempted from paying all fees, but the system is informal. If a person declares himself or herself too poor to pay, the provider (nurse or midwife) determines whether the person “appears” to be poor. Such an informal system is probably more effective at the commune level, where most clients are personally known to the provider, than at the district level. However, no patient is apparently ever turned away, and very few abuses have been reported. Typically about 10 percent of clients do not pay. The system relies on the apparent shame that clients are said to

experience at having to declare themselves too poor to pay. The question that arises is whether some clients simply do not seek services either because they do not know whether they will be exempted or because they do not want to experience the shame of claiming an exemption based on indigence. There has never been a demand survey to collect both information on household income and expenditures as well as information on the utilization of health services, particularly public health services. A demand survey would provide a basis for determining whether cost recovery restricts access to public health services. It is recommended that such a study be undertaken if resources permit, particularly if an income and expenditures component could be piggy-backed onto the large baseline household survey that is scheduled to be undertaken in connection with the ADB project later this year.

Assuming that access on the part of the poor is not significantly restricted by the present level of fees, does this suggest that fees should be raised higher to achieve a greater level of cost recovery? The answer depends on the type of service. In the case of private curative care, where the benefits accrue mainly to the person receiving treatment with no public health effects, fees should probably cover costs. The current practice of not charging for pharmaceuticals is counter to this principle. An exception would be drugs used to treat TB or STDs, whose public health effects can be substantial. Apart from such exceptions, there is no compelling economic rationale for subsidizing curative health care.⁷

The argument for continuing to subsidize preventive health services is much stronger. The objective in pricing preventive services is to encourage their consumption up to the point where the additional *social* cost of providing one more unit of services is equal to the additional *social* benefits from consuming that unit.⁸ Given Cambodians' extremely low health status and only limited knowledge of such preventive interventions as birth spacing, it is likely that the consumption of most preventive services is far below such a social optimum. Under these conditions, it makes sense to continue to subsidize these types of services, even for the general population.⁹ At this point in the development of the health sector, there is no reason to try to increase the proportion of costs recovered. The main effect of doing so would probably be to redistribute any remaining subsidies more heavily toward higher income consumers.

⁷It is sometimes argued that the poor should have access to basic curative health care on equity grounds. However, it is unclear why health care should be subsidized and not other articles of consumption, such as food, clothing, and housing. A related argument is that health is a "merit good," the consumption of which society wishes to encourage through subsidies. However, in Cambodia, it would be difficult to argue that the population consumes too little health care. The available data (the 1993/94 Socio-Economic Survey of Cambodia) suggest that consumers already spend about 7 percent of their income on health care, although not necessarily efficiently. If information is available that suggests that consumers should spend more than this amount, a more direct policy intervention would be to share this information with consumers.

⁸Actually, the same rule should be applied to curative services as well. The difference is that social and private costs and benefits do not differ with most curative care. As noted earlier, TB and STD treatments are exceptions to this general rule.

⁹It can even be argued that the social benefits of preventing HIV infection in a higher-income person are greater than those for a low-income person if the propensity to visit commercial sex workers is positively related to income (i.e., the income elasticity of demand for such services is greater than zero).

With USAID funding, FPIA is currently operating a reproductive health clinic in central Phnom Penh. Services provided include birth spacing (i.e., pills, injectables, IUDs, and condoms), prenatal care, and reproductive tract infection diagnosis and treatment. The quality of services provided is considered to be quite high, and approximately 750 clients are seen per month. Staff is well paid. A midwife earns \$220 per month, for example, compared to less than \$20 in a typical government facility. Fees are charged for all services, and they are somewhat higher than those charged in government facilities. For example, the fee for an initial birth spacing consultation is 1,000 R, and a three-month supply of contraceptives costs 1,500 R. The fee for an IUD-insertion, including the IUD, is 5,000 R. FPIA estimates that it is currently recovering about 15 percent of its clinic operating costs. Approximately 3 percent of its clients do not pay for services. As in ARC clinics, clients are exempted from paying if they say they are too poor to pay.

In addition to its clinic, FPIA sponsors community-based distribution (CBD) workers affiliated with a local women's organization and has a mobile team providing injectable contraceptives. FPIA has agreed to fund a clinic in Sihanoukville and is currently considering opening another reproductive health clinic in Phnom Penh. They do not consider their urban CBD to be cost effective and are considering dropping it. FPIA believes that the monthly operating costs of its clinic are approximately \$5,000 per month. However, it has not done any formal costing and does not, for example, know how the unit costs of its mobile services compare to the unit costs of comparable services in its clinic. Its desire to open another clinic in Phnom Penh is based on the perception that its current clinic is operating at full capacity. It should, however, at least consider whether it might be able to provide services more cost effectively by expanding its mobile services and adding a second shift to its existing facility. With careful analysis and operations research, there should be some scope for lowering FPIA's unit costs over time. Focusing on the cost side currently would probably be a better approach to increasing cost-recovery ratios than raising fees.

CARE assists government health facilities (two district hospitals and numerous commune health centers) in five districts in three different provinces. The focus is on improving the quality of the basic health services promoted in the MOH national health plan. Fees are charged for most services. The fee schedule is similar to that used by ARC summarized in Table 2.7. In addition they have trained traditional birth attendants and midwives and are planning to train 50 pharmacists and drug vendors in one province. The work with pharmacists and drug vendors is potentially very important given the fact that so many Cambodians go directly to these individuals for treatment of acute illness, including a strong preference of men to seek treatment for STDs from pharmacists. Some thought should be given by CARE to a study that would evaluate the post-training quality of care received by clients of pharmacists and drug vendors with that received by clients of commune health centers whose staff has also been trained under the CARE project. If a significant difference is found, this information should be disseminated to consumers.

MSF currently operates two ambulatory care clinics in two communities about one and one-half hours north of Phnom Penh by car. MSF provides technical assistance to Cambodian health providers who offer services in these clinics in return for a share of the revenue collected from fees charged to clients. Laboratory and pharmacy services are provided by franchisees. MSF is using these clinics in an effort to set new standards for health care in the areas they serve (e.g., no dispensing of drugs without prescriptions, encouraging use of oral drugs rather than injections or infusions). They found they needed to promote their services actively in the communities they serve and reduce their fees somewhat from initial high levels. Currently they are recovering only about 7

percent of their monthly operating costs (excluding expatriate technical assistance inputs) from their user fees.

MSF used a novel approach to identify the poor. They worked with commune leaders to develop a list of criteria. It included family size and number of dependents, earnings per month, occupation, housing characteristics, and assets owned (e.g., pig, well, bicycle, motorcycle, TV, generator). They then collected data on residents and classified them according to indigent status. About 10 to 15 percent of the population was classified as indigent, according to these criteria.¹⁰ These families were provided with cards and their photographs are kept on file at the clinics. Unfortunately, it has turned out that relatively few of the indigent actually attend the clinics, suggesting that fees may not be the only obstacle that restricts access of the poor to health care.

It would be interesting for MSF to try working more closely with existing for-profit health providers, which they acknowledge are tough competitors. It might, for example, be possible for MSF to exercise more influence on the quality of care in the private sector by developing an innovative certification scheme. Practitioners who received training in certain areas (e.g., birth spacing and STD treatment and diagnosis) had minimum professional qualifications, and agreed to meet MSF's professional standards in dispensing drugs (including use of disposable needles) could display an "MSF Approved" logo and certificate. PSI could be enlisted to market the idea to consumers that such practitioners do in fact provide higher quality care and more value for the fees charged.

¹⁰Unfortunately, it is not known how well these criteria (or others) serve in identifying the poor. It would be interesting to use data from the 1993/1994 SESC in an effort to identify which criteria, if any, are most effective in identifying the indigent.

3. Conclusions and Follow-up

There is a need to work more with the for-profit sector, including health providers and pharmacists. The existence of a nascent private sector at the commune level in rural areas provides a unique opportunity to strengthen the quality of care in a potentially efficient service delivery environment. Some thought should be given to sponsoring a pilot activity in one province that would emphasize the use of incentives to for-profit providers to dispense high-quality basic health services. An outline of such a pilot is provided in Annex A of this report.

USAID grantees have already introduced user fees and partial cost recovery into their programs. Fees charged for private curative care (including drugs) should probably be raised to cover costs. The current level of fees charged for public health services (i.e., preventive care and certain infectious diseases such as STDs and TB) does not need to be increased at this point. Grantees should instead pay more attention to controlling their unit costs as a way to improve their cost-recovery ratios and to set a good example for the government system. A study is needed to determine whether existing levels of fees for preventive care and the system used to identify and exempt the indigent constitute barriers to access. It should be possible to piggy-back such a study onto surveys already planned under the new ADB project.

USAID grantees may need some technical assistance in connection with cost estimation, cost analysis, and fee setting. As an interim step, PHR should furnish copies of readily available manuals on family planning and primary health service costing to USAID/HPN. If USAID decides to sponsor a private-sector pilot, additional technical assistance will be needed to prepare the planning documents required by the new National Charter for all such pilots as well as to plan and implement the system for monitoring the performance of private providers.

Annex A: Pilot Testing in the Private Sector

A two-year pilot test is proposed on the effectiveness of working with the existing mixed public-private health system in one province of Cambodia. The pilot effort would:

- ▲ Provide training and necessary equipment, commodities and other supplies to village-level for-profit health providers in all districts of one province. It would also strengthen the capacity of one for-profit referral facility in the provincial capital to provide high-quality birth spacing services, prenatal care, and reproductive tract infection diagnosis and treatment.
- ▲ Develop a contract with each village-level private provider that sets specific coverage targets for a set of basic health services and specific rates of compensation to providers for meeting and exceeding these targets.
- ▲ Monitor performance at the provider and household level in order that provincial health department staff can determine the extent to which targets have been met or exceeded.
- ▲ Evaluate the pilot test.

Each of these components is described in more detail below.

Providing Resources to Private Providers

One or more private for-profit practitioners or clinics in the provincial capital would be assisted by USAID to develop the capacity to provide high-quality birth spacing services and prenatal care and to diagnose and treat reproductive tract infections. The recipient(s) of this assistance could charge walk-in clients for these services, but in return for continuing access to subsidized contraceptives, medicines, and supplies needed for these services, the recipient(s) would agree to provide services to referral clients from rural villages for a fixed fee. The referred client would present a voucher completed with her or his name, village address, and the name of the referring community health worker. The clinic provider would then record the type of service provided to the client on the voucher and present it to the sponsoring USAID project for reimbursement at the agreed-upon fee. The project would be responsible for assuring quality of care and that only appropriate and necessary services were provided to referred clients.

Resources would be provided to up to one qualified private practitioner in each village throughout the pilot province. In most cases, these practitioners would be public-sector health workers with private practices on the side. It is anticipated that they would use their training in their public-sector work as well. Village-level workers would be trained to motivate clients to use family planning services and supply and resupply their clients with condoms, pills, and injectables. Clients wishing an IUD would be referred to a for-profit referral center in the provincial capital. Village-level workers would also be trained to screen clients for reproductive tract infections and would refer

clients suspected of having such infections to the urban referral facility. Village-level workers would be trained to provide basic prenatal care and would be supplied with birth kits. They would refer clients with special problems to the urban facility. They would also be trained and equipped to treat diarrhea and acute respiratory diseases and to supply clients with needed micronutrients.

Village-level practitioners would be permitted to charge fees to their private clients, but they would need to agree to provide free (or heavily discounted) services to the poor, either in their private practices or while working in public facilities. Initially providers would be permitted to identify the poor using informal procedures. As soon as the MOH has developed standard definitions of the poor and formal procedures for identifying them, however, private practitioners would have to agree to apply these criteria. In addition the contracting and monitoring procedures described below are designed to provide strong incentives to private providers to extend services to the poor to maximize coverage of basic services in their communities.

Inputs required:

- ▲ At the commune level, the inputs required would be the similar to those required to support the same package of services in the public sector. However, it would be necessary to provide equipment to each private provider instead of providing only one set per clinic.
- ▲ Approximately \$50,000 would also be required to strengthen the capacity of province-level clinics (or practitioners) to provide referral services in birth spacing, prenatal care, and STD diagnosis and treatment. Approximately \$20,000 per year would also be needed to reimburse the clinic for services provided to referral clients. Training and supervision of staff at this facility would be provided by the USAID-supported project.
- ▲ No international technical assistance would be necessary for this component of the pilot beyond what would normally be programmed for training and procurement.

Developing a Contract with Private Providers

A baseline survey would be conducted in each participating village as the pilot test begins. This survey will provide information on a set of indicators most relevant to the package of public health services supported by the pilot. Possible indicators might include:

- ▲ percentage of children less than 12 months of age fully immunized against polio, diphtheria, and measles;
- ▲ percentage of married women ages 15 to 45 years who know at least two modern methods of birth spacing, without prompting, and a supply source for both;
- ▲ modern method contraceptive prevalence rate;
- ▲ percentage of women ages 15 to 45 with knowledge of correct use for selected contraceptives;

- ▲ percentage of women ages 15 to 45 who know how to prepare ORS;
- ▲ percentage of these women who use ORS in connection with recent episodes of diarrhea;
- ▲ percentage of women ages 15 to 45 who know warning signs of ARI (pneumonia);
- ▲ knowledge about breastfeeding and infant weaning practices;
- ▲ percentage of women ages 15 to 45 with at least one antenatal care visit during last pregnancy;
- ▲ percentage of women ages 15 to 45 who have received a second dose of tetanus toxoid;
- ▲ percentage of births attended by a trained midwife;
- ▲ percentage of children ages 6 months to 5 years who have received vitamin A supplement in last 6 months; and
- ▲ neonatal, infant, and child mortality rates.

A contract would be developed with the health provider specifying compensation based on the attainment of specified improvements in indicators, such as those listed above. Alternative compensation schemes can be tested and evaluated within the pilot province. One possibility might be to withhold any compensation unless a target is attained. Alternatively compensation might be linked to each unit improvement in the indicator or might require simultaneous progress on more than one indicator.¹¹

Inputs required:

- ▲ Provincial health department staff would take the lead in developing contracts with the village-level providers, based on guidelines developed with the technical assistance staff. Data from the baseline survey would be used to calculate baseline values of the indicators for each village. (See discussion below under Monitoring Performance.)
- ▲ Three three-week technical assistance visits would be required to obtain MOH approval of the pilot (i.e., satisfy the requirements of the newly adopted National Charter), identify appropriate indicators, design the baseline survey, train interviewers, and analyze the data. In addition, approximately \$50,000 would be needed to cover field costs for the baseline survey.

¹¹An alternative approach, which could be easily tested in the proposed pilot, would be to contract with private providers to offer specific public health services (including information, education, and communication) on a fee-for-service basis, requiring them to submit records with the names and addresses of persons served. In this case, monitoring would involve follow-up surveys of randomly selected clients to confirm that the services were actually provided and to obtain measures of client satisfaction. Such an approach, which focuses on outputs rather than outcomes, would presumably cost less but might be less effective than focusing providers on achieving outcomes. This is an example of the sort of issues that could be addressed through the proposed pilot project.

Monitoring Performance

A critical element of the pilot project would be the establishment of a village-level monitoring system. A baseline household survey would collect information on each indicator specified in the provider's contract. The questionnaire would be as short and simple as possible. In addition to the indicators themselves, a few additional variables (e.g., education, land and livestock holdings, housing characteristics) might be collected for use in classifying households according to their socioeconomic status and in an effort to measure access on the part of the poor.

The baseline survey would be conducted by a province-level survey team. The sample would be a 10 percent random sample of the households in each participating village (i.e., each village in which a private-sector provider had agreed to participate in the pilot project). This would result in a sample of approximately 5 to 10,000 households, depending on the population size of the pilot province. To provide for fairly large sampling errors at the village level, the baseline values of each village's indicators would be based partly on values for the village, partly on values for the commune, and partly on values for the district (e.g., 50, 30, and 20 percent respectively). Follow-up surveys would be conducted at the end of each year and would be used to evaluate each contractor's provider's performance. The values of each indicator used to evaluate the contractor's performance would again be based partly on village, commune, and district values.

The province-level survey team would also conduct baseline and follow-up surveys of the contracted private health workers to assess the effects of their training and quality of the services they provide. It is anticipated that this facility survey would be conducted by the supervisors of the household surveys and would therefore not entail additional cost.

Inputs required:

- ▲ Two international technical assistance visits of two weeks each would be needed to plan the first follow-up survey and do the data analysis. Approximately \$50,000 would be needed to cover the field costs of the survey.
- ▲ Inputs required for a second follow-up survey would be similar to those required in connection with the first survey.

Evaluation of the Pilot's Results

There would be no control area in connection with the proposed pilot project. The same levels of assistance would be provided to all districts and communes in the province. However, there would be some experimentation with alternative compensation schemes in connection with the development of provider contracts. The effects of varying the terms of the contract on the various performance and outcome indicators would be assessed with the household survey data using multivariate analysis (multiple regression).

In the absence of formal control areas in the proposed pilot, it is anticipated that large baseline and follow-up surveys already planned in connection with the ADB project in five provinces would provide some basis for comparing performance and outcomes attained in the pilot province with those obtained in other provinces using a different set of project interventions. An effort would be made to collect information on the same indicators as the ADB project to make such comparisons possible. The sample list of indicators above already shares many indicators in common with the ADB project design.

Bibliography

“Social and Economical Aspects of Basic Health Services: Findings of Case Studies in Four Villages in the Provinces of Takeo, Rieng Svey, Cham Kampong and Kampong Chang,” Appendix 15 of *Basis Health Services Project: Cambodia*, Asian Development Bank, T.A. No. 2223-CAM (September 1995).

Heiner Grosskurth et al., "Impact of Improved Treatment of Sexually Transmitted Diseases on HIV Infection in Rural Tanzania: Randomized Control Trial," *The Lancet*, 346:530-536 (August 26, 1995).